LINDSAY CONSULTING PTY LTD. STRUCTURAL AND CIVIL ENGINEERS

ACN 079 744 808 ABN 61 478 386 385 GST REGISTERED AS TRUSTEE FOR THE LINDSAY FAMILY TRUST

Ref: 160422 24th March 2016

The Fence Shop Suite 3C, 1st Floor Regatta Corporate Bldg, 2 Innovation Parkway, Warana Qld 4575, Australia

Attn: Murray,

HANDRAIL CERTIFICATION PALMERSTON GATEWAY SHARED PPEDESTRIAN BRIDGE

With respect to the above project Lindsay Consulting Pty Ltd has carried out a structural check of the proposed handrails including the handrail connections and Lindasy Consulting Pty Ltd are satisfied that the proposed connection ultilizing Interclamp handrail connections 146 and 198 together will be in accordance with AS5100 and AS1428 and suitable for a design wind load of 77 m/sec. The handrails used shall be:-

- 40NB medium post 48.3mm OD x 3.2mm wall at 1.8m centres
- Interclamp 146-D48 lower fitting and 198-D48 double lugged bracket giving a total of 5 fixing points
- Pedestrian barrier panels as per the attached leaflet (weight = 30kg per panel)
- All connections shall be Hilti 16mm diam. threaded rod set 150mm deep into the side of the bridge deck with a minimum of 5 fixing points.

Should you require any further information please do not hesitate to contact me at the above address.

On and Behalf of **LINDSAY CONSULTING PTY LTD**

ason Lindsa RPEQ 4928